

August, 1981

23rd ANNUAL MCGRAW-HILL SURVEY OF
OVERSEAS OPERATIONS OF U.S. INDUSTRIAL COMPANIES, 1981-83

Faced with a troubled world economy this year and last, American industrial companies are pulling in their horns on foreign capital spending.

U.S. companies estimate that in 1981 their majority-owned foreign affiliates will hike spending on property, plant, and equipment by 14% to \$43.4 billion (Table I). That may seem like a hefty increase; but considering that much of the world is suffering from double-digit inflation, foreign affiliates' "real" increase in capital expenditures will be quite small.

And even including inflation, the expected 1981 boost is small compared to the 24% and 25% spending jumps in 1979 and 1980, respectively.

What's more, advances in foreign capital spending beyond 1981 are scaled down even further: In 1982, foreign affiliates of U.S. industrial companies expect to raise spending by 9%, and in 1983 they foresee an 8% rise in spending.

These figures are based on a July-August survey of U.S. manufacturing and petroleum companies. The survey sample includes nearly 80 companies accounting for 27% of total capital expenditures by U.S. industry's majority-owned foreign affiliates. The figures cited

in this report, however, represent foreign capital spending by all U.S. industrial companies, and not just spending by companies included in the survey.

The Two Worlds of Foreign Spending

Looking at foreign capital spending in the aggregate correctly indicates that the pace of spending should be slowing in the next two years. However, it fails to reveal the huge gap between plans in the petroleum industry versus those in manufacturing: U.S. petroleum companies plan to boost foreign capital spending by a record 42% this year, while manufacturing affiliates plan an actual spending decrease of 4%. If all plans are realized, foreign affiliates of U.S. oil firms will spend \$21.4 billion on property, plant, and equipment in 1981, nearly as much as the entire manufacturing sector's expenditures of \$22 billion.

Beyond 1981, oil companies intend to step down their current torrid rate of spending growth--to 14% next year and 13% in 1983. Yet these advances are still well above those now planned by manufacturing firms. As a result, the survey projects that foreign capital expenditures by U.S. petroleum affiliates will surpass those of all manufacturing affiliates next year--by \$24.5 billion versus \$23 billion.

(The petroleum industry is broken out separately from the manufacturing sector in Table I because a large portion of petroleum affiliates' capital expenditures are related to exploration and production, which is considered a mining rather than a manufacturing activity.)

The flip side to the strength in petroleum spending is a large planned decline in chemical affiliates' purchases of plant, equipment, and property. U.S. chemical companies foresee capital spending of their majority-owned affiliates plummeting by 56% this year to \$1.6 billion. While some ground would be gained next year--planned spending is up 14% to \$1.8 billion--expenditures are expected to fall sharply again in 1983 to \$1.3 billion.

This year's drop in chemical capital spending reflects, at least in part, the very tough year chemical companies had in foreign markets last year. As a probable indication of what U.S. companies experienced last year, about three-fourths of foreign chemical companies either lost money or saw their profits drop in 1980.¹ Chemical affiliates were also operating at a low 75% of capacity at the end of last year, compared to 81% for industry on average (Table V).

And the picture this year may not be brighter. More than half of the chemical companies in the survey expect profit margins in 1981 to fall below margins in 1980 (Table VIII). Sales of U.S. chemical companies' foreign affiliates, meanwhile, are expected to rise by 10% this year (Table IX). But after stripping inflation away, sales may be flat or even down. And operating rates are projected to remain low.

In 1982, chemical firms anticipate an improvement in sales and profit margins. However, 28% of them expect a further worsening of foreign margins next year.

¹Based on a survey of 43 foreign chemical companies. Chemical Week, Aug. 12, p. 4.

Chemical companies are not alone in their pessimistic 1981 outlook. Among manufacturers as a whole, 61% expect foreign profit margins this year to be lower than last. And they forecast a 1981 sales rise of only 5%.

Next year, manufacturers foresee a 15% pickup in sales on average, similar to the chemical forecast. But in contrast to chemicals, a large majority of all manufacturers (60%) anticipate an improvement in profit margins, while only 18% expect a further decline.

Oil Spending Flows to Asia, Africa

While capital spending of U.S. manufacturing affiliates is expected to remain flat from 1980 to 1983, petroleum affiliate expenditures are expected to leap by nearly \$13 billion, from \$15 billion in 1980 to \$27.7 billion in 1983. Where will all that money be going?

In the near term, a big chunk will go into the European Economic Community (EEC).¹ Though the survey does not ask for spending on specific projects, it is a good bet that a significant portion of the \$9.9 billion earmarked for the EEC in 1981 (Table II) is for development of North Sea oil. Other monies may be for upgrading refineries.

In percentage terms, oil spending this year is also expected to jump significantly in all other parts of the world, except in Europe outside the EEC.

From 1981 to 1983, the areas of the world that stand to garner most of the U.S. oil industry's foreign investment are Asia and Africa,

¹Includes the United Kingdom, Germany, France, Italy, Belgium, Luxembourg, the Netherlands, Denmark, and Ireland.

not including Asian and African countries that are part of the Middle East. In Asia, oil expenditures are projected to triple to \$3.7 billion in 1983. In Africa, expenditures are forecast to grow by three and a half times, reaching \$5.4 billion in 1983.

If these plans materialize, one-third of all U.S. oil affiliates' capital spending would be ticketed for Asia and Africa by 1983, whereas the 1981 portion is estimated at only 13%. By contrast, the EEC share would fall from 46% in 1981 to 33%.

In addition to Asia and Africa, oil company spending will also be shifted towards Latin America in the next few years, according to the survey. Latin American spending is projected to rise from \$2 billion in 1981 to \$4.5 billion in 1983.

Thus, the tremendous sums in oil companies' foreign capital budgets bode well for economies in Asia, Africa, and Latin America. But even though much of petroleum's spending is targeted for distant lands, those big capital budgets will also bring good tidings to American companies. The reason: Half of the oil-related equipment U.S. companies install abroad will actually be bought in the U.S. (Table XI). Since 97% of oil companies' foreign capital expenditures this year will be for machinery and equipment (Table III), that works out to about \$10 billion worth of orders for American firms.

Manufacturers, on the other hand, say their foreign affiliates will "source" about 13% of their capital spending in the U.S. this year. And that represents another \$2+ billion in orders for American capital goods producers.

Manufacturers' foreign capital investment is not, however, likely to spur big increases in orders for U.S.-made equipment during the next

couple of years. And the only region of the world that seems to be in for much of a rise in manufacturing investment is Latin America, where U.S. affiliates' spending is projected to jump from \$3.6 billion in 1980 to \$5.5 billion in 1983. This strength in overall manufacturing investment in Latin America is expected to be fairly broad-based, arising from sharp planned increases by the transportation equipment, chemicals, food and beverages, and "other" manufacturing industries.

TABLE I

OVERSEAS CAPITAL EXPENDITURES BY AMERICAN COMPANIES
(Millions of Dollars)

<u>INDUSTRY</u>	<u>Actual*</u> <u>1980</u>	<u>Planned</u> <u>1981</u>	<u>% Change</u> <u>1980-81</u>	<u>Planned</u> <u>1982</u>	<u>% Change</u> <u>1981-82</u>	<u>Planned</u> <u>1983</u>	<u>% Change</u> <u>1982-83</u>
Primary & Fabricated Metals	\$ 892	\$ 1,030	16%	\$ 1,199	16%	\$ 1,211	1%
Machinery	6,187	6,169	0	6,076	-2	5,251	-14
Electrical Machinery	1,463	1,726	18	1,576	-9	1,610	2
Transportation Equipment	5,120	5,542	8	7,085	28	7,479	6
Paper	1,413	1,078	-24	1,105	3	1,161	5
Chemicals	3,564	1,584	-56	1,800	14	1,290	-28
Food & Beverages	1,722	1,763	2	1,259	-29	2,078	65
Other Manufacturing**	2,533	3,079	22	2,855	-7	3,317	16
ALL MANUFACTURING	22,894	21,971	-4	22,955	4	23,397	2
Petroleum	15,043	21,430	42	24,505	14	27,698	13
ALL INDUSTRY	37,937	43,401	14	47,460	9	51,095	8

NOTE: Figures refer to foreign affiliates of U.S. companies in which a majority share is owned by U.S. companies. Data for 1981, 1982, 1983 are based on a sample, but represent spending by all U.S. majority-owned foreign affiliates.

* SOURCE: U.S. Dept. of Commerce

** Includes textiles, instruments, rubber, and stone, clay, glass.

TABLE II
OVERSEAS CAPITAL EXPENDITURES BY REGIONS
(Millions of Dollars)

INDUSTRY	CANADA				LATIN AMERICA			
	Estimated 1980	-----Planned----- 1981	1982	1983	Estimated 1980	-----Planned----- 1981	1982	1983
Primary & Fabricated Metals	\$ 116	\$ 139	\$ 154	\$ 183	\$ 515	\$ 593	\$ 686	\$ 651
Machinery	767	880	807	709	954	970	900	925
Electrical Machinery	90	108	98	100	52	88	29	30
Transportation Equipment	1,547	876	804	555	520	564	1,041	1,099
Paper	533	406	416	437	53	40	41	43
Chemicals	248	124	276	252	285	170	481	365
Food & Beverages	132	240	532	672	635	793	638	1,352
Other Manufacturing	276	140	85	90	550	779	996	1,059
ALL MANUFACTURING	3,709	2,913	3,172	2,998	3,564	3,997	4,812	5,524
Petroleum	3,550	3,963	3,836	2,955	914	1,973	3,029	4,485
ALL INDUSTRY	7,259	6,876	7,008	5,953	4,478	5,970	7,841	10,009

TABLE II (Cont'd)

OVERSEAS CAPITAL EXPENDITURES BY REGIONS
(Millions of Dollars)

INDUSTRY	EEC				EUROPE OTHER THAN EEC			
	Estimated 1980	-----Planned----- 1981 1982 1983			Estimated 1980	-----Planned----- 1981 1982 1983		
Primary & Fabricated Metals	\$ 235	\$ 240	\$ 282	\$ 305	\$ 4	\$ 5	\$ 21	\$ 11
Machinery	3,794	3,561	3,747	3,206	169	191	250	149
Electrical Machinery	892	1,104	1,059	1,086	136	136	136	136
Transportation Equipment	2,455	3,465	4,445	4,697	255	255	255	255
Paper	700	527	541	570	31	31	31	31
Chemicals	2,509	1,064	465	303	354	111	269	224
Food & Beverages	270	142	54	31	213	24	0	0
Other Manufacturing	1,570	2,006	1,722	2,096	59	7	5	7
ALL MANUFACTURING	12,425	12,109	12,315	12,294	1,221	760	967	813
Petroleum	6,771	9,853	11,281	9,061	940	867	876	1,212
ALL INDUSTRY	19,196	21,962	23,596	21,355	2,161	1,627	1,843	2,025

TABLE II (Cont'd)
OVERSEAS CAPITAL EXPENDITURES BY REGIONS
(Millions of Dollars)

<u>INDUSTRY</u>	<u>MIDDLE EAST</u>				<u>AUSTRALIA, NEW ZEALAND, SOUTH AFRICA</u>			
	<u>Estimated</u> <u>1980</u>	<u>-----Planned-----</u> <u>1981</u> <u>1982</u> <u>1983</u>			<u>Estimated</u> <u>1980</u>	<u>-----Planned-----</u> <u>1981</u> <u>1982</u> <u>1983</u>		
Primary & Fabricated Metals	\$ 0	\$ 0	\$ 4	\$ 4	\$ 11	\$ 38	\$ 44	\$ 45
Machinery	2	2	1	1	314	302	122	101
Electrical Machinery	21	18	2	2	70	72	51	55
Transportation Equipment	0	0	0	0	293	319	433	608
Paper	0	0	0	0	70	54	55	58
Chemicals	4	1	5	4	26	16	46	31
Food & Beverages	19	59	0	0	266	307	35	23
Other Manufacturing	0	0	0	0	48	98	5	3
 ALL MANUFACTURING	 46	 80	 12	 11	 1,098	 1,206	 791	 924
 Petroleum	 143	 247	 364	 426	 1,058	 1,791	 1,892	 460
 ALL INDUSTRY	 189	 327	 376	 437	 2,156	 2,997	 2,683	 1,384

TABLE II (Cont'd)

OVERSEAS CAPITAL EXPENDITURES BY REGIONS
(Millions of Dollars)

INDUSTRY	JAPAN-ASIA (OTHER THAN MIDDLE EAST)				AFRICA (OTHER THAN MIDDLE EAST AND SOUTH AFRICA)			
	Estimated 1980	-----Planned----- 1981 1982 1983			Estimated 1980	-----Planned----- 1981 1982 1983		
Primary & Fabricated Metals	\$ 11	\$ 15	\$ 8	\$ 12	\$ 0	\$ 0	\$ 0	\$ 0
Machinery	186	256	238	150	1	7	11	10
Electrical Machinery	195	195	195	195	7	5	6	6
Transportation Equipment	6	5	0	0	44	58	107	265
Paper	26	20	21	22	0	0	0	0
Chemicals	127	95	241	100	11	3	17	11
Food & Beverages	111	104	0	0	76	94	0	0
Other Manufacturing	29	48	40	57	1	1	2	5
ALL MANUFACTURING	691	738	743	536	140	168	143	297
Petroleum	725	1,171	1,472	3,700	942	1,565	1,755	5,399
ALL INDUSTRY	1,416	1,909	2,215	4,236	1,082	1,733	1,898	5,696

TABLE III

OVERSEAS CAPITAL EXPENDITURES FOR PROPERTY, BUILDINGS, AND MACHINERY & EQUIPMENT

<u>INDUSTRY</u>	-----Estimated 1980-----			-----Planned 1981-----		
	<u>Property</u>	<u>Buildings</u>	<u>Machinery & Equipment</u>	<u>Property</u>	<u>Buildings</u>	<u>Machinery & Equipment</u>
Primary & Fabricated Metals	3%	8%	89%	5%	10%	85%
Machinery	4	26	70	2	24	74
Electrical Machinery	0	6	94	0	10	90
Transportation Equipment	1	26	73	1	23	76
Paper	4	15	81	6	3	91
Chemicals	1	9	90	0	10	90
Food & Beverages	1	16	83	1	10	89
Other Manufacturing	1	15	84	1	10	89
ALL MANUFACTURING	2	19	79	1	17	82
Petroleum	21	0	79	3	0	97
ALL INDUSTRY	10	11	79	2	9	89

TABLE III (Cont'd)

OVERSEAS CAPITAL EXPENDITURES FOR PROPERTY, BUILDINGS, AND MACHINERY & EQUIPMENT

<u>INDUSTRY</u>	-----Planned 1982-----			-----Planned 1983-----		
	<u>Property</u>	<u>Buildings</u>	<u>Machinery & Equipment</u>	<u>Property</u>	<u>Buildings</u>	<u>Machinery & Equipment</u>
Primary & Fabricated Metals	4%	7%	89%	4%	8%	88%
Machinery	0	23	77	0	16	84
Electrical Machinery	0	6	94	0	6	94
Transportation Equipment	1	23	76	1	24	75
Paper	5	3	92	6	3	91
Chemicals	1	32	67	4	35	61
Food & Beverages	0	15	85	0	25	75
Other Manufacturing	1	3	96	1	4	95
 ALL MANUFACTURING	 1	 18	 81	 1	 17	 82
 Petroleum	 2	 3	 95	 2	 3	 95
 ALL INDUSTRY	 2	 10	 88	 2	 9	 89

TABLE IV
FOREIGN AFFILIATES' CAPACITY CHANGE

	<u>% Change In Physical Capacity</u>	
	<u>1980 Actual</u>	<u>1981 Estimated</u>
Primary & Fabricated Metals	6%	7%
Machinery	7	9
Electrical Machinery	5	5
Transportation Equipment	2	5
Chemicals	4	3
Paper	0	0
Food & Beverages	8	10
Other Manufacturing	7	4
 ALL MANUFACTURING	 5	 6
 Petroleum	 -4	 5
 ALL INDUSTRY	 1	 6

TABLE V
OPERATING RATES

<u>INDUSTRY</u>	<u>Dec. 1980</u>	<u>Expected Dec. 1981</u>
Primary & Fabricated Metals	86%	86%
Machinery	79	73
Electrical Machinery	85	85
Transportation Equipment	84	85
Paper	82	82
Chemicals	75	76
Food & Beverages	88	88
Other Manufacturing	75	75
ALL MANUFACTURING	81	80
Petroleum	70	78
ALL INDUSTRY	77	79

TABLE VI

EXPORT SALES EXPECTATIONS OF AMERICAN MANUFACTURERS
(Millions of Dollars)

<u>INDUSTRY</u>	<u>Actual*</u> <u>1980</u>	<u>Expected</u> <u>1981</u>	<u>% Change</u> <u>1980-81</u>	<u>Expected</u> <u>1982</u>	<u>% Change</u> <u>1981-82</u>	<u>Expected</u> <u>1983</u>	<u>% Change</u> <u>1982-83</u>
Primary & Fabricated Metals	\$12,634	\$14,124	12%	\$15,478	10%	\$16,895	9%
Machinery	45,234	49,202	9	54,646	11	60,670	11
Electrical Machinery	11,817	13,013	10	14,330	10	15,780	10
Transportation Equipment	31,408	34,884	11	30,619	-12	36,355	19
Paper	4,973	5,719	15	6,291	10	6,920	10
Chemicals	17,757	19,595	10	23,100	18	27,117	17
Food & Beverages	7,552	8,911	18	9,624	8	10,490	9
Other Manufacturing	28,910	31,707	10	34,001	7	37,018	9
 ALL MANUFACTURING	 160,285	 177,155	 11	 188,089	 6	 211,245	 12

* SOURCE: U.S. Dept. of Commerce

TABLE VII
 EXPECTED PROFIT MARGINS ON SALES,
 OVERSEAS SUBSIDIARIES vs. U.S.

<u>INDUSTRY</u>	-----1981-----			-----1982-----		
	<u>% of Companies Answering Higher</u>	<u>Lower</u>	<u>Same</u>	<u>% of Companies Answering Higher</u>	<u>Lower</u>	<u>Same</u>
Primary & Fabricated Metals	60%	40%	0%	60%	20%	20%
Machinery	50	44	6	56	38	6
Electrical Machinery	0	100	0	0	100	0
Transportation Equipment	22	67	11	33	67	0
Paper	0	50	50	0	50	50
Chemicals	27	73	0	30	60	10
Food & Beverages	0	100	0	0	100	0
Other Manufacturing	17	58	25	55	27	18
 ALL MANUFACTURING	 30	 61	 9	 41	 49	 10
 Petroleum	 40	 40	 20	 40	 40	 20
 ALL INDUSTRY	 30	 59	 11	 41	 48	 11

TABLE VIII

EXPECTED OVERSEAS PROFIT MARGINS ON SALES,
1981 vs. 1980, 1982 vs. 1981

<u>INDUSTRY</u>	-----1981 vs. 1980-----			-----1982 vs. 1981-----		
	<u>% of Companies Answering</u> <u>Higher</u>	<u>Lower</u>	<u>Same</u>	<u>% of Companies Answering</u> <u>Higher</u>	<u>Lower</u>	<u>Same</u>
Primary & Fabricated Metals	20%	80%	0%	66%	17%	17%
Machinery	25	62	13	62	13	25
Electrical Machinery	33	67	0	33	67	0
Transportation Equipment	33	56	11	78	11	11
Paper	50	0	50	0	50	50
Chemicals	36	55	9	36	28	36
Food & Beverages	33	67	0	67	33	0
Other Manufacturing	25	75	0	73	0	27
ALL MANUFACTURING	29	61	10	60	18	22
Petroleum	40	40	20	50	25	25
ALL INDUSTRY	30	60	10	59	19	22

TABLE IX

EXPECTED SALES OF FOREIGN AFFILIATES

<u>INDUSTRY</u>	-----Expected % Change-----		
	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83</u>
Primary & Fabricated Metals	11%	14%	14%
Machinery	4	14	15
Electrical Machinery	10	10	10
Transportation Equipment	5	24	10
Paper	8	10	10
Chemicals	10	16	14
Food & Beverages	-3	20	11
Other Manufacturing	6	10	13
ALL MANUFACTURING	5	15	13
Petroleum	33	10	18
ALL INDUSTRY	8	19	12

TABLE X
INVESTMENT FOR AIR & WATER POLLUTION CONTROL

INDUSTRY	Overseas Pollution Control Expenditures			Pollution Control Expenditures as Percent of Capital Spending			
	(Millions of Dollars)			-----Overseas-----		-----U.S.*-----	
	Actual 1980	Planned 1981	% Change 1980-81	Actual 1980	Planned 1981	Actual 1980	Planned 1981
Primary & Fabricated Metals	\$ 19	\$ 23	21%	2%	2%	9.1%	11.6%
Machinery	68	68	0	1	1	1.7	1.3
Electrical Machinery	6	7	17	0	0	2.1	3.0
Transportation Equipment	53	61	15	1	1	4.1	2.4
Paper	NA	NA	NA	NA	NA	6.7	5.9
Chemicals	79	18	-77	1	1	7.6	7.8
Food & Beverages	NA	NA	NA	NA	NA	2.7	3.3
Other Manufacturing	65	44	-32	3	1	4.2	5.7
ALL MANUFACTURING	290	221	-24	1	1	4.8	4.9
Petroleum	753	1,049	39	5	5	4.2	3.9
ALL INDUSTRY	1,043	1,270	22	3	3	4.7	4.7

* SOURCE: 14th Annual McGraw-Hill Survey of Pollution Control Expenditures

TABLE X (Cont'd)

INVESTMENT FOR AIR & WATER POLLUTION CONTROL

<u>INDUSTRY</u>	<u>Overseas Pollution Control Expenditures</u>			
	<u>--Millions of Dollars--</u>		<u>-----% Change-----</u>	
	<u>1982</u>	<u>1983</u>	<u>1981-82</u>	<u>1982-83</u>
Primary & Fabricated Metals	\$ 36	\$ 59	57%	64%
Machinery	69	61	1	-12
Electrical Machinery	7	7	0	0
Transportation Equipment	71	76	16	7
Paper	NA	NA	NA	NA
Chemicals	57	52	217	-9
Food & Beverages	NA	NA	NA	NA
Other Manufacturing	48	36	9	-25
ALL MANUFACTURING	288	291	30	1
Petroleum	1,145	NA	9	NA
ALL INDUSTRY	1,433	NA	13	NA

TABLE XI
FOREIGN CAPITAL SPENDING "SOURCED" IN THE U.S

	<u>% of Foreign Affiliates' Capital Goods Purchases Made in the U.S.</u>			
<u>INDUSTRY</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Primary & Fabricated Metals	8%	8%	8%	8%
Machinery	17	17	16	14
Electrical Machinery	36	34	30	30
Transportation Equipment	7	7	7	7
Chemicals	18	22	29	28
Paper	0	0	0	0
Food & Beverages	19	19	15	15
Other Manufacturing	6	11	9	12
 ALL MANUFACTURING	 14	 13	 15	 14
 Petroleum	 50	 50	 50	 50
 ALL INDUSTRY	 28	 28	 29	 28